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$F1 < F2 < F3$

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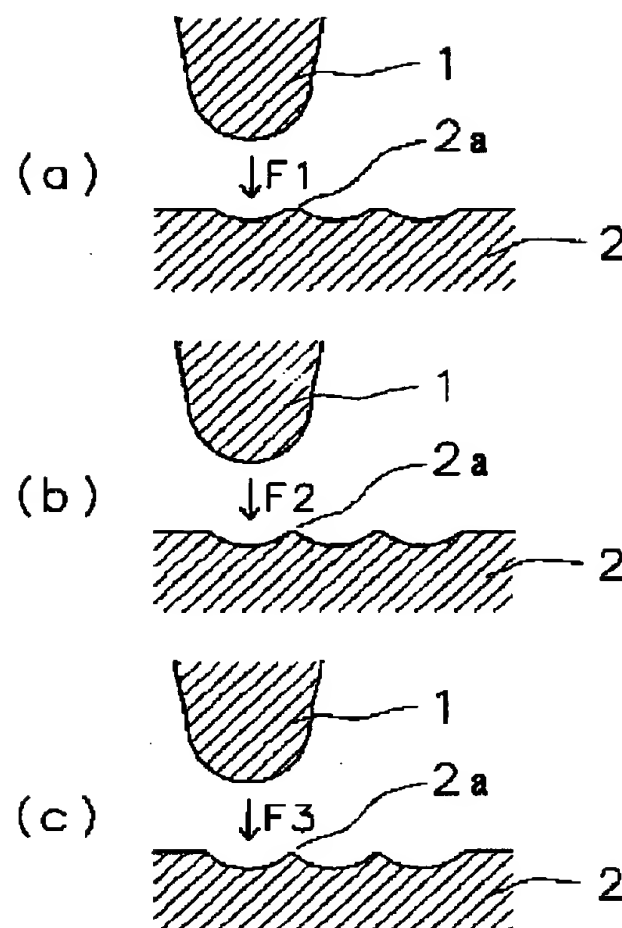
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TITLE : MANUFACTURE OF MOLD, AND
OPTICAL ELEMENT MANUFACTURED
THEREBY



ABSTRACT : PROBLEM TO BE SOLVED: To form a dent having desired shape by pressing an indenter on the mold matrix surface over several times on the same position during formation of the dent.

SOLUTION: The surface of a mold matrix (cavity surface) comprising a martensitic stainless steel is subject to a metal polishing process so as to form the cavity surface of the mold matrix in the mirror surface. Firstly, an indenter 1 is pressed on the cavity surface at a pressing force F1. After the dent is formed on the full surface of the cavity surface at the pressing force F1, the indenter 1 is then pressed on the formed dent at the pressing force F2 larger than F1. Further, the indenter 1 is pressed on the formed dent at the force larger than the pressing force F2. The pressing force is gradually increased and pressed over several times, which controls the lateral shift of materials 2a which are the adjacent boundaries of the bent of the mold matrix 2 and forms the dent precisely, so as to obtain a mold with good transfer rate.

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